

IN THE CLAIMS

Please amend the claims as follows:

1. - 39. (Canceled)

40. (Currently Amended) A system for making a conductive circuit on a substantially non-conductive substrate, the system comprising:

an ~~indenter~~ indenting roller having a pattern surface adapted to form a plurality of indentations on a major surface of the substrate, the indentations for receiving conductive material;

a plater adapted to plate conductive material on the major surface of the substrate and within the indentations formed in the major surface of the substrate; and

a grinder adapted to remove a portion of the conductive material plated on the major surface of the substrate to leave conductive material within the indentations in the major surface of the substrate.

41. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material between the plurality of indentations.

42. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material within the plurality of indentations.

43. (Previously Presented) The system according to claim 40 wherein the grinder is adapted to remove a portion of the conductive material within the plurality of indentations and the conductive material over the non-conductive material between the indentations to form a planar surface including non-conductive material and conductive material.

44. (Currently Amended) The system of claim 40 wherein the indenting roller ~~indenter~~ is adapted to form indentations which form an opening in the substrate sheet.

45. (Currently Amended) The system of claim 40 wherein the indenting roller indenter is adapted to form indentations which form an opening passing through the substrate sheet.

46. (Currently Amended) The system of claim 40 wherein the indenting roller indenter is adapted to plastically deform [a] the substrate sheet.

47. (Currently Amended) The system of claim 40 wherein the substrate sheet is formed of non-conductive plastic.

48. (Currently Amended) The system of claim 40 wherein in the indenting roller indenter further comprises:

- a first roller apparatus adapted to form a plurality of indentations in the substrate; and
- a second roller apparatus adapted to form a plurality of indentations in the substrate.

49. (Currently Amended) The system of claim 40 wherein the conductive material within at least some of the plurality of indentations is separated from the conductive material within some of the other indentations by [non-]insulative material.

50. (Previously Presented) The system according to claim 49 wherein the grinder removes a portion of the conductive material within the plurality of indentations.

51. (Previously Presented) The system according to claim 49 wherein the grinder removes a portion of the conductive material within the plurality of indentations and the conductive material over the non-conductive material between the indentations to form a planar surface including non-conductive material and conductive material.

52. (Currently Amended) The system according to claim 49 wherein the indenting roller indenter includes a plate having a negative of the indentations in the substrate.

53. (Previously Presented) The system of claim 49 wherein the indentations include at least one channel.

54. (Previously Presented) The system of claim 49 wherein the indentations include at least one pad.

55. (Previously Presented) The system of claim 49 wherein the indentations include at least one via.

56. (Currently Amended) The system of claim 49 ~~wherein the indenter is a roller~~ further comprising another indenting roller having another pattern surface adapted to form a plurality of indentations on another major surface of the substrate.

57. (Currently Amended) The system of claim 40 [56] wherein the indenting roller includes an interchangeable plate having a negative of the indentations in the substrate.

58. (Canceled)

59. (Previously Presented) The system of claim 49 wherein the grinder further comprises a plurality of grinding elements.

60. (Currently Amended) The system of claim 49 wherein the indenting roller ~~indenter~~ further comprises a plurality of indenting devices.

61. (Currently Amended) The system of claim 49 wherein the indenting roller ~~indenter~~ is adapted to form indentations which form an opening in the substrate ~~sheet~~.

62. (Currently Amended) The system of claim 49 wherein the indenting roller ~~indenter~~ is adapted to form indentations which form an opening passing through the substrate ~~sheet~~.

63. (Currently Amended) The system of claim 49 wherein the indenting roller indenter is adapted to plastically deform [a] the substrate sheet.

64. (Currently Amended) The system of claim 49 wherein the substrate sheet is formed of non-conductive plastic.

65. (Previously Presented) The system of claim 49 further comprising a base, the base producing a force that counteracts the indenter.

66. (Currently Amended) The system of claim 49 further comprising:
a first load roller; and
a second load roller, wherein the first load roller and the second load roller are adapted to place a load on the major surface of the substrate sheet and on another surface of the substrate sheet.

67. (Previously Presented) The system according to claim 49 wherein the grinder removes a portion of the conductive material between the plurality of indentations.